

15 Park Avenue  
Gaithersburg, MD 20877

## Memorandum

**From:** Steve Willis  
**To:** Wayne Miller  
**Date:** June 3, 2018  
**Subject:** June 1, 2018 Site visit to observe PFAS Investigation activities at Former Williams Air Force Base.

Mr. Miller:

I conducted a site visit to the Former Williams Air Force Base on June 1, 2018 to observe remedial construction activities at Site ST012 and document collection of Hydrasleeve groundwater samples associated with the investigation of Per- and PolyfluoroAlkyl Substances (PFAS).

### Site ST012

I briefly visited Site ST012, where Amec personnel were in the process of unloading the sulfate mixing tank from the flatbed truck that had just arrived. The truck delivering the sulfate was also onsite waiting for the sulfate to be offloaded. Attachment 1 includes photos of the mixing tank and some of the sulfate containers that were subsequently unloaded, as well as recently completed discharge piping from the frac tank.

### PFAS Investigation

Groundwater samples were collected from the Hydrasleeves that were previously deployed during the week of May 14. The sampling team was led by Joel Morales of Aerostar.

Prior to retrieving a Hydrasleeve sampler, depth to groundwater was measured in the well. The water level meter was decontaminated between each well using a solution of Liquinox and PFAS-free water supplied by the analytical laboratory. After measuring and recording the water level, the Hydrasleeve was retrieved from the well by slowly raising it through the water column and out of the well. Upon

removal of the Hydrasleeve, a discharge tube was used to puncture the HydraSleeve and create a smooth flow of water from the sleeve directly into the laboratory-supplied HDPE sample containers. After collecting the laboratory sample, additional water from the Hydrasleeve was collected in a separate container for field parameter measurements.

Water remaining in the Hydrasleeve after sample collection was poured to a 5-gallon plastic container to be transferred to the IDW holding tank located at the lay-down area. The used Hydrasleeves and deployment tape were deposited in a separate container for disposal.

I observed sampling of the wells listed in Table 1. Note that I did not observe sampling of wells WILPMW-009, -010, 011, or -015, which are located in the secured area of the airfield. I also did not observe sampling of the remaining wells conducted on June 2 to complete the PFAS sampling effort. Attachment 1 includes site photos taken during the visit.

**Table 1. June 1, 2018 Hydrasleeve Deployment Information**

Well ID	Depth to Groundwater (Ft. Below TOC)	Well Screened Interval (Ft. Below TOC)	Total Measured Well Depth (Ft. Below TOC)	Hydrasleeve Deployment Depth (Ft. below TOC)	Sample Collection Time
WILPMW005	122.93	116.01-146.01	146.08	139.99	0810
WILPMW003	155.14	136.43-176.43	176.5	165.67	0830
WILPMW004 <sup>1</sup>	148.37	145.26-175.26	175.33	159.61	0905
WILPMW007	134.95	146.18-176.18	176.25	140.47	0940
WILPMW008	151.49	140.85-170.85	170.92	161.17	1245
LF01-W35S	135.98	111.5-151.5	151.66	143.80	1340
LF01-W35M	135.85	151.5-191.5	191.51	171.50	1400
LF01-W35D	136.85	191.5-231.5	231.71	211.5	1415
LF01-W36S	141.11	118-158	157.76	149.45	1435
LF01-W36M	141.59	158-198	197.76	178.00	1450
WILPMW006	129.62	NA	NA	139.99	1525

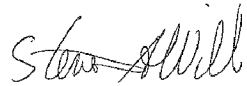
notes:

<sup>1</sup> Well WILPMW004 water was cloudy with a turbidity reading of 160 NTU.

NA – Information not available

Please contact me at (480) 316-3373 or e-mail at [steve@uxopro.com](mailto:steve@uxopro.com) if you have comments or questions regarding this memorandum.

Thank you,

A handwritten signature in cursive script, appearing to read "Steve Will".

UXOPro, Inc.

**ATTACHMENT 1**  
**SITE PHOTOS**



Photo 1. Amec crew removing the sulfate mixing tank from the trailer.



Photo 2. Sulfate containers stored beneath the shade structure.



Photo 3. Discharge piping connected to the frac tank.



Photo 4. Collecting a Hydrasleeve groundwater sample from well WILPMW005.

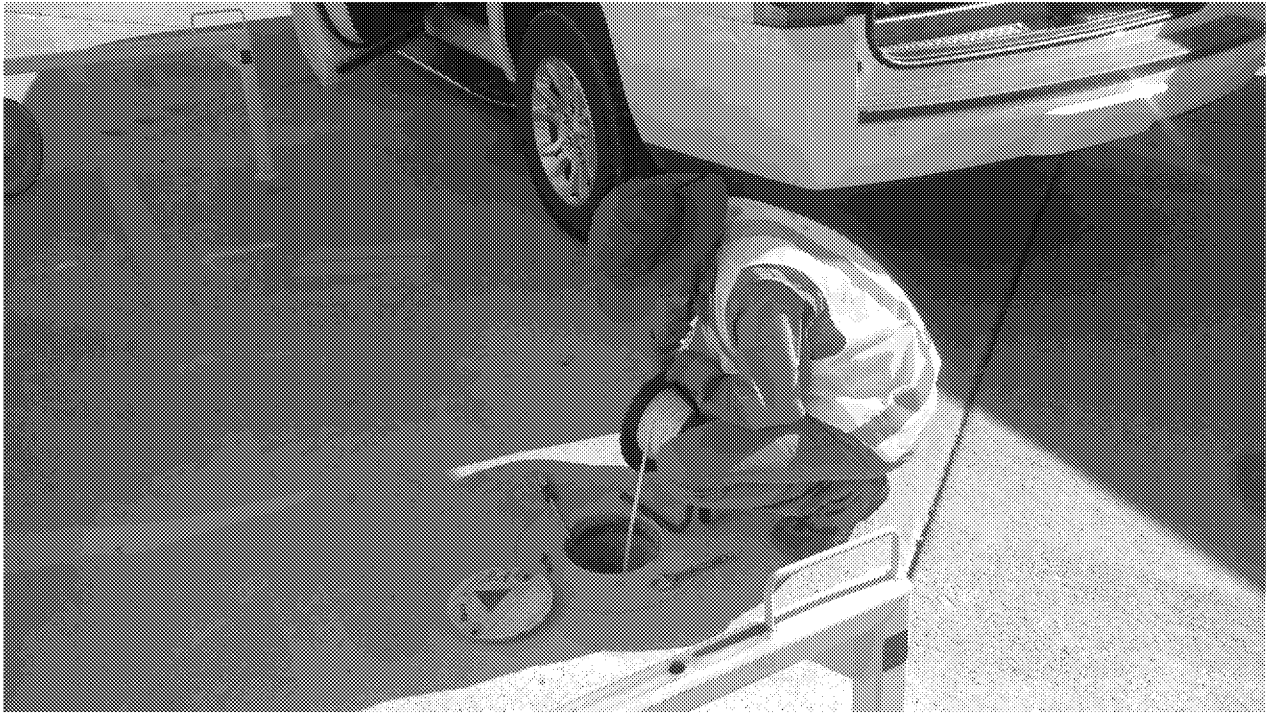


Photo 5. Measuring the water level in well WILPMW003.



Photo 6. Collecting a Hydrasleeve groundwater sample from well WILPMW003.





Photo 7. Measuring field parameters.



Photo 8. Measuring the water level in well WILPMW004.





Photo 9. Collecting a Hydrasleeve groundwater sample from well WILPMW004.



Photo 10. Measuring the water level in well WILPMW007.



Photo 11. Collecting a Hydrasleeve groundwater sample from well WILPMW007.



Photo 12. Measuring the water level in well WILPMW008.



Photo 13. Collecting a Hydrasleeve groundwater sample from well WILPMW008.



Photo 14. Collecting a Hydrasleeve groundwater sample from well LF01-W35S.



Photo 15. Collecting a Hydrasleeve groundwater sample from well LF01-W35M.



Photo 16. Collecting a Hydrasleeve groundwater sample from well LF01-W35D.





Photo 17. Collecting a Hydrasleeve groundwater sample from well LF01-W36S.



Photo 18. Collecting a Hydrasleeve groundwater sample from well LF01-W36M.



Photo 19. Measuring the water level in well WILPMW006.



Photo 20. Collecting a Hydrasleeve groundwater sample from well WILPMW006.